



Docket No. 99-68CON1
PATENT

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on 6-30-04

BY:

Suzanne Shadley
Suzanne Shadley

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Klaerner et al.

Serial No.: 10/775,672

Filed: 2/10/04

For: Controlled-Architecture Polymers
And Use Thereof As Separation
Media

Confirmation No. 1136

Group Art Unit: 1714

Examiner: Unknown

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants submit herewith patents, publications and other information of which they are aware, which they believe an examiner may consider to be material to the patentability of the claims of this application, and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. § 1.56.

While this Information Disclosure Statement may contain "material" information pursuant to 37 C.F.R. § 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to herein is either "material" or "prior art" to the invention disclosed and claimed in the above-referenced application unless specifically designated as such. Applicants specifically reserve the right, where appropriate, to avoid or antedate any such reference by the appropriate arguments or showings under 37 C.F.R. § 1.131 and § 1.608, or any other appropriate means.

A completed PTO Form 1449 listing each reference is submitted herewith, and it is respectfully requested that an Examiner initialed copy of the PTO Form 1449 be returned to the undersigned. Copies of each reference listed on the PTO Form 1449 are enclosed.

This Information Disclosure Statement is being filed within three months of the filing or entry of the national stage of this application, or before the mailing of a first Office Action on the merits, whichever is later. No fee is

required under 37 C.F.R. § 1.97(b). However, in the event that more than 90 days from filing have elapsed and a first Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the fee required under 37 C.F.R. 1.17(p) to Deposit Account Number 50-0496.

The Examiner is hereby requested to consider these references and other information and make them of record in the above-referenced application. Applicants respectfully submit that the claims of this application are patentable over the above-cited references and information. Examination and allowance of this application at an early date are requested.

Date: _____

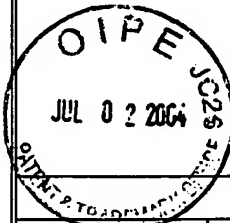
6-30-01

Respectfully submitted,

By: _____

James H. Ackley
Registration No. 45,695

Symyx Technologies, Inc.
3100 Central Expressway
Santa Clara, CA 95051
Tel: (408) 720-2598
Fax: (408) 773-4029

INFORMATION DISCLOSURE CITATION PTO-1449 			ATTORNEY'S DOCKET NO.:		APPLICATION NO.:	
			99-68CON1		10/775,672	
			APPLICANT: Klaerner et al.			
			FILING DATE: 2/10/04		GROUP: 1714	CONFIRMATION 1136
US PATENT DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	3,422,144	1/14/69	Hoffmann et al.	260	570	4/27/65
	4,093,586	6/6/78	Stephen	260	45.8	
	4,581,429	4/8/86	Solomon et al.	526	220	
	4,783,508	11/8/88	Moore et al.	525	310	
	4,792,593	12/20/88	Schulz et al.	526	240	
	5,126,021	6/30/92	Grossman	204	180.1	7/17/91
	5,264,101	11/23/93	Demorest et al.	204	299 R	5/1/92
	5,270,271	12/14/93	Lundin et al.	502	8	
	5,290,418	3/1/94	Menchen et al.	204	299 R	9/24/92
	5,322,912	6/21/94	Georges et al.	526	204	
	5,346,545	9/13/94	Chassot	106	410	
	5,374,527	12/20/94	Grossman	435	6	1/21/93
	5,374,729	12/20/94	Galbo	546	242	
	5,385,996	1/31/95	Rizzardo et al.	526	240	
	5,389,141	2/14/95	Chassot	106	498	
	5,401,804	3/28/95	Georges et al.	525	267	1/13/94
	5,468,365	11/21/95	Menchen et al.	204	299 R	9/22/93
	5,498,679	3/12/96	Moffat et al.	526	204	3/30/95
	5,504,243	4/2/96	Sakamoto et al.	560	205	
	5,552,028	9/3/96	Madabhushi et al.	204	451	6/2/95
	5,567,292	10/22/96	Madabhushi et al.	204	451	12/6/94
	5,582,960	12/10/96	Nielsen et al.	430	508	
	5,631,337	5/20/97	Sassi et al.	526	307.2	1/19/96
	5,633,129	5/27/97	Karger et al.	435	6	2/3/96
	5,652,289	7/29/97	Eisenhart et al.	524	376	
EXAMINER:			DATE CONSIDERED:			

Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION PTO-1449			ATTORNEY'S DOCKET NO.: 99-68CON1		APPLICATION NO.: 10/775,672	
			APPLICANT: Klaerner et al.			
			FILING DATE: 2/10/04		GROUP: 1714	CONFIRMATION: 1136
US PATENT DOCUMENTS						
	5,698,648	12/16/97	Rizzardo et al.	526	232	
	5,711,767	1/27/98	Gande et al.	44	423	
	5,728,747	3/17/98	Kazmaier et al.	522	11	
	5,759,369	6/2/98	Menchen et al.	204	456	3/24/95
	5,804,619	9/8/98	Nicol et al.	524	68	
	5,830,966	11/3/98	Thang et al.	526	321	
	5,844,025	12/1/98	Cunkle et al.	524	99	
	5,852,118	12/22/98	Horrior et al.	525	90	8/25/97
	5,874,511	2/23/99	Rizzardo et al.	526	286	
	5,877,344	3/2/99	Gande et al.	560	205	
	5,883,211	3/16/99	Sassi et al.	526	307.2	4/23/96
	5,885,432	3/23/99	Hooper et al.	204	469	1/22/96
	5,919,861	7/6/99	Kazmaier et al.	525	26	7/16/97
	5,919,871	7/6/99	Nicol et al.	525	333	
	6,001,232	12/14/99	Chu et al.	204	455	9/4/96
EXAMINER:				DATE CONSIDERED:		

Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION PTO-1449			ATTORNEY'S DOCKET NO.: 99-68CON1		APPLICATION NO.: 10/775,672	
			APPLICANT: Klaerner et al.			
			FILING DATE: 2/10/04		GROUP: 1714	CONFIRMATION: 1136
FOREIGN DOCUMENTS						
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION?
	EP 0 135 280 A2	3/27/85	EPO			
	EP 0 545 184		EPO	C08F	293/00	No
	EP 0 887 362 A1	12/30/96	EPO			
	EP 0 891 986 A1	1/20/99	EPO			
	EP 0 891 997 A1	1/20/99	EPO			
	EP 0 970 973 A1	1/12/00	EP	C08F	4/00	
	GB 1 218 456	1/6/71	UK			
	WO 00/42423	7/20/00	PCT	G01N	27/26	No
	WO 00/75207	12/14/00	PCT	C08F	293/00	No
	WO 02/090409	11/14/02	PCT	C08F	293/00	No
	WO 96/24620	8/15/96	PCT	C08F	4/00	Yes
	WO 97/36944	10/9/97	PCT			
	WO 97/46593	12/11/97	PCT			
	WO 98/01478	1/15/98	PCT	C08F	2/38	No
	WO 98/07758	2/26/98	PCT			
	WO 98/13392	4/2/98	PCT			
	WO 98/20050	5/14/98	PCT			
	WO 98/30601	7/16/98	PCT			
	WO 98/58974	12/30/98	PCT			Yes
	WO 99/00426	1/7/99	PCT			Yes
	WO 99/03894	1/28/99	PCT	C08F	2/00	No
	WO 99/46261	9/16/99	PCT	C07D	405/12	
EXAMINER:			DATE CONSIDERED:			

Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION PTO-1449	ATTORNEY'S DOCKET NO.: 99-68CON1	APPLICATION NO.: 10/775,672	
	APPLICANT: Klaerner et al.		
	FILING DATE: 2/10/04	GROUP: 1714	CONFIRMATION: 1136
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages Etc.)			
B. L. Carvalho and E.L Thomas, <i>Phys. Rev. Lett.</i> , 1994 , 73, pp 3321-4			
Barron, Annelise E., et al., "A Transient Entanglement Coupling Mechanism for DNA Separation by Capillary Electrophoresis in Ultradilute Polymer Solutions," <i>Electrophoresis</i> , 1994 , 15, 597-615			
Barron, Annelise E., et al., "Capillary Electrophoresis of DNA in Uncross-Linked Polymer Solutions," <i>Journal of Chromatography A</i> . 652 (1993) 3-16			
Barron, Annelise E., et al., "DNA Separations by Slab Gel and Capillary Electrophoresis: Theory and Practice," <i>Separation and Purification Methods</i> , 24(1), 1-118 (1995)			
Benoit et al. "Controlling Free-Radical Polymerization in the Presence of a Novel Asymmetric Nitroxyl Radical," <i>Polymer Preprints</i> , 38 (1), pp. 729-730, (1997)			
Benoit, Didier, et al., "Development of a Universal Alkoxyamine for "Living" Free Radial Polymerizations," <i>J. Am. Chem. Soc.</i> , 1999 , 121, 3904-3920			
Hawker et al., (<i>J. Polym. Sci. Part A: Pol. Chem.</i> 1998 , 36, 2161-2167			
Chiari, Marcella, et al., "Separation of Oligonucleotides and DNA Fragments by Capillary Electrophoresis in Dynamically and Permanently Coated Capillaries, Using a Copolymer of Acrylamide and β -D-Glucopyranoside as a New Low Viscosity Matrix with High Sieving Capacity," <i>Electrophoresis</i> , 1998 , 19, 3154-3159			
Chiari, Marcella, et al., "Separations of DNA Fragments by Capillary Electrophoresis in N-substituted Polyacrylamides," <i>Journal of Chromatography A</i> , 781 (1997) 347-355			
Marestin, Catherine, et al., Laboratoire de Chimie et Procédés de Polymérisation, CNRS-CPE, Villeurbanne, Fr., "Direct Measurement of Oligomers Entry Rate onto Latex Particles in a Emulsion Polymerization," <i>Macromolecules</i> (1998), 31(5), 1686-1689.			
Dondoni, et al., (<i>Synth. Commun.</i> 1994 , 24, 2537-2550)			
Fitch, R.M., et al., <i>Ins. Mater. Sci., Univ. Connecticut, Storrs, Conn.</i> , "Emulsion polymerization. Kinetics of radical capture by particles," <i>Prog. Colloid Polym. Sci.</i> (1975), 56 1-11.			
Maxwell, Ian A., et al., <i>Sch. Chem., Univ. Sydney, Sydney, Australia</i> , "Entry of free radicals into latex particles in emulsion polymerization," <i>Macromolecules</i> (1991), 24(7), 1629-40.			
Heller, Christoph, "Finding a Universal Low Viscosity Polymer for DNA Separation (II), <i>Electrophoresis</i> , 1998 , 19, 3114-3127			
G. Coulon, D. Ausserre, and T.P. Russell, <i>J. Phys. (Paris)</i> 51, 777 (1990)			
Georges et al., "The Stable Free-Radical Polymerization Process: Role of Excess Nitroxide," <i>Controlled Radical Polymerization (ACS Symposium Series #685, 1998)</i> , pp. 170-179			
German, et al., "Controlled Radical Polymerization in Emulsion," <i>Macromolecule</i> , 1997, 30, 324-326			
Goetzinger, Wolfgang, et al., "Characterization of High Molecular Mass Linear Polyacrylamide Powder Prepared By Emulsion Polymerization as a Replaceable Polymer Matrix for DNA Sequencing by Capillary Electrophoresis," <i>Electrophoresis</i> 1998 , 19, 242-248			
Grimaldi, et al., "Synthesis and Applications to "Living" Free Radical Polymerization of a New Class of Nitroxyl Radicals," <i>Polymer Preprints</i> , Vol. 38, No. 1, 4/97, 651-654			
Han, Futian, et al., "High-Efficiency DNA Separation by Capillary Electrophoresis in a Polymer Solution with Ultralow Viscosity," <i>Anal. Chem.</i> 1999 , 71, 2385-2389			
Hawker et al., "Development of a New Class of Rate-Accelerating Additives for Nitroxide-Mediated 'Living' Free Radical Polymerization," <i>Tetrahedron</i> , Vol. 53, No. 45, pp. 15225-15236 (1997)			
EXAMINER:		DATE CONSIDERED:	

Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION PTO-1449	ATTORNEY'S DOCKET NO.:	APPLICATION NO.:
	99-68CON1	10/775,672
	APPLICANT: Klaerner et al.	
	FILING DATE: 7/31/00	GROUP: Unknown
OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages Etc.)		
	J.C. Roberts, <i>et al. Tetrahedron Lett.</i> , 1997, 38, 355-358	
	Janzen et al., <i>J. Am. Chem. Soc.</i> , 91:16, pp. 4481-4490 (July 30, 1969)	
	Kotake et al., "Bimodal Inclusion of Nitroxide Radicals by b-cyclodextrin in Water as Studied by Electron Spin Resonance and Electron Nuclear Double Resonance," <i>J. Am. Chem. Soc.</i> 1989, 111, 2066-2070	
	Lansalot, M., et al., "Nitroxide-Mediated Controlled Free-Radical Emulsion Polymerization of Styrene," <i>Am. Chem. Society</i> , (1999) 40, 2, 317-318	
	Madabhushi, R. S., "Separation of 4-Color DNA Sequencing Extension Products in Noncovalently Coated Capillaries Using Low Viscosity Polymer Solutions," <i>Electrophoresis</i> , 1998, 19, 224-230	
	Marestin, C., et al., "Nitroxide Mediated Living Radical Polymerization of Styrene in Emulsion," <i>Macromolecules</i> (1998), 31, 12, 4041-4044	
	Poehlein <i>et al.</i> , "Characterization of Water-Soluble Oligomer in Acrylic Acid-Styrene Emulsion Copolymerization," <i>J. Appl. Polym. Sci.</i> , vol. 50, pp. 2173-2183 (1993)	
	Prodpran et al., "Nitroxide-Mediated Living Free Radical Miniemulsion Polymerization of Styrene," Presented at 217th National Meeting, Amer. Chem. Soc., Anaheim, CA March 24, 1999, 534-535	
	Ruiz-Martinez, Marie C., et al., "A Sample Purification Method for Rugged and High-Performance DNA Sequencing by Capillary Electrophoresis Using Replaceable Polymer Solutions. A. Development of the Cleanup Protocol," <i>Anal. Chem.</i> 1998, 70, 1516-1527	
	Salas-Solano, Oscar, et al., "A Sample Purification Method for Rugged and High-Performance DNA Sequencing by Capillary Electrophoresis Using Replaceable Polymer Solutions. B. Quantitative Determination of the Role of Sample Matrix Components on Sequencing Analysis," <i>Anal. Chem.</i> 1998, 70, 1528-1535	
	Salas-Solano, Oscar, et al., "Routine DNA Sequencing of 1000 Bases in Less Than One Hour by Capillary Electrophoresis with Replaceable Linear Polyacrylamide Solutions," <i>Anal. Chem.</i> 1998, 70, 3996-4003	
	Senoo, Masahide, et al., "Living Radical Polymerization of <i>N,N</i> -Dimethylacrylamide With $\text{RuCl}_2(\text{PPh}_3)_3$ -Based Initiating Systems," <i>Macromolecules</i> 1999, 32, 8005-8009	
	T.P. Russell, G. Coulon, V.R. Deline, and D.C. Miller, <i>Macromolecules</i> 22, 4600-6 (1989)	
	Ugelstad, <i>et al.</i> , "A Kinetic Investigation of the Emulsion Polymerization of Vinyl Chloride," <i>J. Polymer Sci., Part C</i> , no. 27, pp. 49-68 (1969)	
	Zhou, Haihong, et al., "DNA Sequencing Up To 1300 Bases in Two Hours by Capillary Electrophoresis With Mixed Replaceable Linear Polyacrylamide Solutions," <i>Anal. Chem.</i> 2000, 72, 1045-1052	
EXAMINER:		DATE CONSIDERED:

Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.